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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:  
**HEMPHILL, SCOTT et al.**

Serial No.: 09/687,759

Filed: October 12, 2000

For: **MODELING THE APPEARANCE OF THE  
ROUND BRILLIANT CUT DIAMOND; AN  
ANALYSIS OF FIRE AND SCINTILLATION**

) Group Art Unit: Not Yet Assigned  
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)  
Examiner: Not Yet Assigned  
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)  
)

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

In accordance with 37 CFR §§ 1.97 and 1.98, the items identified in this Information Disclosure Statement ("IDS") are brought to the attention of the Office. The items are listed on the attached form PTO-1449 and copies are enclosed for the convenience of the Examiner.

The items identified in this IDS may or may not be "material" pursuant to 37 CFR § 1.56. The submission thereof by Applicant is not to be construed as an admission that any such patent, publication or other information referred to therein is material or considered to be material (37 CFR § 1.97(h)), or even qualifies as "prior art" under 35 USC § 102 with respect to this invention unless specifically designated by Applicant as such.

**INFORMATION DISCLOSURE STATEMENT FILING PROVISION:**

This IDS is believed to be timely in that it is being submitted under 37 CFR § 1.97(b), that is

(1) within three months of the filing date of the application, which is not a continued prosecution

LA-177505.1

**CERTIFICATE OF MAILING**  
(37 C.F.R. §1.8a)

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as First Class Mail in an envelope addressed to the Commissioner for Patents, Washington, D.C. 20231.

VIVIAN M. GUTIERREZ  
Name of Person Mailing Paper

*Vivian M. Gutierrez*  
Signature of Person Mailing Paper

January 11, 2001  
Date of Deposit

application filed under § 1.53(d); or (2) within three months of entry of the national stage as set forth in 37 CFR § 1.491; or (3) before the mailing of a first Office action on the merits; or (4) before the mailing of a first Office action after filing a request for continued examination under § 1.114. Thus, no fee is required.

However, if the undersigned is in error in this regard, Applicant respectfully requests that the Office consider this IDS as filed under 37 CFR § 1.97(c), if applicable, and charge the fee due under 37 CFR §1.17(p) to the deposit account referenced below.

**STATEMENT UNDER 37 CFR § 1.97(e):**

No item contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this statement after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 CFR § 1.56(c) more than three months prior to the filing of this IDS.

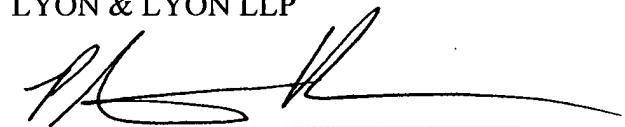
**PAYMENT AND/OR AUTHORIZATION TO CHARGE FEES:**

The Commissioner is authorized to charge any fees required by the filing of these papers, and to credit any overpayment to Lyon & Lyon's Deposit Account No. **12-2475**.

Respectfully submitted,

LYON & LYON LLP

By:

  
Peter C. Hsueh  
Reg. No. 45,574

Dated: January 10, 2001

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22249

FORM PTO-1449

**LIST OF PATENTS AND OTHER ITEMS FOR APPLICANTS  
INFORMATION DISCLOSURE STATEMENT**

(Use several sheets if necessary)

JAN 16 2001

ATTY. DOCKET NO.  
254/255SERIAL NO.  
09/687,769APPLICANT:  
HEMPHILL, Scott et al.FILING DATE:  
October 12, 2000GROUP:  
N/A

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	AA	257,617	12/09/80	WOLKENFELD	99	140	11/20/78
	AB	3,744,919	07/10/73	BABB	356	189	07/16/71
	AC	3,794,424	02/26/74	EICKHORST et al.	356	30	03/04/71
	AD	3,858,979	01/07/75	ELBE	356	30	09/26/72
	AE	3,867,032	02/18/75	BRUCK	356	30	03/08/74
	AF	3,944,368	03/16/76	BEESLEY	356	30	03/16/76
	AG	4,033,683	07/05/77	TANCREDI	353	7	07/14/76
	AH	4,056,952	11/08/77	OKUDA	63	32	04/01/76
	AI	4,152,069	05/01/79	BRUCK	356	30	02/04/77
	AJ	4,186,838	02/05/80	LEVITT et al.	209	581	07/28/78
	AK	4,280,625	07/28/81	GROBBELAAR et al.	209	582	03/21/79
	AL	4,291,975	09/29/81	RACCAH	356	30	01/21/80
	AM	4,330,062	05/18/82	CONWAY et al.	209	582	02/19/80
	AN	4,461,568	07/24/84	WELBOURN et al.	356	30	06/10/81
	AO	4,476,982	10/16/84	PADDOCK et al.	209	582	10/07/82
	AP	4,482,245	11/13/84	MAKABE et al.	356	30	11/13/84
	AQ	4,508,449	04/02/85	OKAZAKI	356	30	04/02/85
	AR	4,527,895	07/09/85	RUBIN	356	30	01/25/83
	AS	4,534,644	08/13/85	BEESLEY	356	30	03/22/83
	AT	4,615,902	10/07/86	FALCOFF et al.	427	8	09/03/85
	AU	4,647,194	03/03/87	SHIGETOMI et al.	356	30	06/28/84
	AV	4,875,771	10/24/89	BOWLEY et al.	356	30	10/24/89
	AW	4,907,875	03/13/90	BOWLEY et al.	356	30	01/14/88

## EXAMINER:

Not yet assigned

## DATE CONSIDERED:

EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609;  
 Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant

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JAN 16 2001

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254/255SERIAL NO.  
09/687,789APPLICANT:  
HEMPHILL, Scott et al.FILING DATE:  
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N/A

	AX	4,951,825	08/28/90	HAWKINS et al.	209	558	05/25/89
	AY	5,005,971	04/09/91	DAVIS	356	30	07/03/90
	AZ	5,044,123	09/03/91	HOFFMAN	51	73	03/22/90
	BA	5,056,826	10/15/91	SUWA	283	67	06/25/90
	BB	5,064,281	11/12/91	DAVIS	356	30	03/14/91
	BC	5,118,181	06/02/92	YIFRACH et al.	356	30	10/19/90
	BD	5,143,212	09/01/92	ROBERTS et al.	206	223	04/03/91
	BE	5,182,616	01/26/93	ROBERTS et al.	356	402	04/03/91
	BF	5,285,297	02/08/94	ROSE et al.	358	518	08/19/92
	BG	5,335,293	08/02/94	VANNELLI et al.	382	17	06/16/92
	BH	5,339,176	08/16/94	SMILANSKY et al.	358	504	02/04/91
	BI	5,422,711	06/06/95	CAN	356	30	10/18/93
	BJ	5,430,538	07/04/95	KOBAYASHI	356	30	12/10/93
	BK	5,515,157	05/07/96	CAN	356	30	07/02/95
	BL	5,544,254	07/06/96	HARTLEY et al.	382	108	03/08/95
	BM	5,579,407	11/26/96	MUREZ	382	164	09/02/93
	BN	5,615,005	03/25/97	VALENTE et al.	356	30	01/23/95
	BO	5,801,819	09/01/98	SPEAR et al.	356	30	08/18/95
	BP	5,818,953	10/06/98	QUEISSER et al.	382	110	04/17/96
	BQ	5,828,405	10/27/98	VANIER et al.	348	61	10/27/98
	BR	5,835,200	11/10/98	SMITH et al.	356	30	02/03/97
	BS	5,899,503	05/04/99	YOSHIZAWA	283	70	11/07/97
	BT	5,950,178	09/07/99	BORGATO	705	37	07/29/97
	BU	5,966,673	10/12/99	SHANNON, Sr.	702	35	01/10/97
	BV	5,983,238	11/09/99	BECKER et al.	707	104	12/26/97

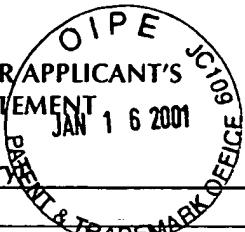
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	BW	6,020,954	02/01/00	AGGARWAL	356	30	05/28/98
	BX	6,030,595	02/29/00	SUMTYA et al.	423	446	07/22/96

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES NO
	BY	EP 0 041 348 A2	09/12/81	EP			
	BZ	EP 0 041 348 B1	09/12/81	EP			
	CA	EP 0 147 002 A2	03/07/85	EP			
	CB	EP 0 147 002 B1	03/07/85	EP			
	CC	EP 0 611 160 A2	08/17/94	EP			
	CD	EP 0 611 160 A3	08/17/94	EP			
	CE	5-79993		Japan			
	CF	7-333158		Japan			
	CG	9-273994		Japan			
	CH	11-255511		Japan			
	CI	57-204440		Japan			
	CJ	58-728		Japan			
	CK	58-38843		Japan			
	CL	58-92920		Japan			
	CM	DE 3600115 A1		Germany			
	CN	WO 87/03963	07/02/87	PCT			
	CO	WO 88/05534	07/28/88	PCT			
	CP	WO 92/17388	10/15/92	PCT			
	CQ	WO 96/23207	08/01/96	PCT			
	CR	WO 96/07894 A1	03/14/96	PCT			

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	CS	WO 99/05629	02/04/99	TRADE MARK CERTIFICATE				
	CT	WO 99/61890	12/02/99	PCT				
	CU	GB 2 010 474 A	10/13/77	United Kingdom (GB)				
	CV	GB 2 036 360 A	10/09/78	United Kingdom (GB)				

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CW	Burridge, A.D., "Quarter Century of Diamond Research," <i>Gems &amp; Gemology</i> (Fall 1972) <u>14</u> (3): 66-77.
CX	Collins, A.T., "Pitfalls in Color Grading Diamonds by Machine," <i>Gems &amp; Gemology</i> (Spring 1984) <u>20</u> (1):14--21.
CY	Crowningshield, R., "Developments and Highlights at GIA's Lab in New York," <i>Gems &amp; Gemology</i> (Fall 1973) <u>14</u> (7):212-215 .
CZ	Eickhorst, M., "Subjective and Objective Colour Grading of Diamonds," <i>Diamond World Review</i> (1977) <u>3</u> :5/6,
DA	Fritsch, et al., "The Identification of Zachery-Treated Turquoise", <i>Gems &amp; Gemology</i> (Spring 1999) <u>35</u> (1): 4-16.
DB	Holmes, J., "Color Range Form Variations in Diamonds," <i>Gems &amp; Gemology</i> (Summer 1947) <u>5</u> (10): 430-446.
DC	Huffer, H., "Okuda Diamond Color Grader," <i>Jewelers' Circular-Keystone</i> (April 1983) pp. 48-50.
DD	Hurlbut, C.S., Jr., "Causes of Color in Gemstones," <i>Gems &amp; Gemology</i> (Summer 1949) <u>6</u> (6). 170-179
DE	King, J., "Grading Fancy-Color Diamonds," <i>Proc. of the International Gemological Symposium</i> (1991) pp. 62-63.
DF	King, J. et al., "Characterizing Natural-Color Type IIB Blue Diamonds," <i>Gems &amp; Gemology</i> (Winter 1998) <u>34</u> (4):246-268
DG	King, J. et al., "Color Grading of Colored Diamonds in the GIA Gem Trade Laboratory," (Winter 1994) <u>30</u> (4):220-242.
DH	Lakowski, R., "Diamond Colour Grading: A Comparative Evaluation," <i>Association Internationale Del La Couleur</i> (1997), pp. 472-477
DI	Liddicoat, R. et al., "The Jeweler's Manual," Gemological Institute of America, pp. 28-41
DJ	Liddicoat, R., "Developments and Highlights at GIA's Lab in Los Angeles," <i>Gems &amp; Gemology</i> (Fall 1973) <u>14</u> (7):200-207.
DK	Loeffler, B. et al., "Shedding Light on the Color of Gems and Minerals," <i>American Scientist</i> (1976) <u>64</u> :636-647.
DL	Moses, T. et al., "A Contribution to Understanding the Effect of Blue Fluorescence on the Appearance of Diamonds," <i>Gems &amp; Gemology</i> (Winter 1997) <u>33</u> (4):244-259.
DM	McCarthy, D., "Microspectrometer Is a Diamond's Best Friend," <i>Photonics</i> (March 2000) <u>34</u> (3):66-67.
DN	Nelson, J.B., "The Colour Bar in the Gemstone Industry," <i>J. Gemm.</i> (1986) <u>20</u> (4):217-237.
DO	Read, P. , "Visual Colorimetry and Comparison Grading," <i>J. Gemm.</i> (1980) <u>17</u> (1):29-42.

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	DP	Read, P., Gemmological Instruments - 2nd edition (1983) pp. 74-83.
	DQ	Scarratt, K., "The Identification of Artificial Coloration in Diamond," <i>Gems &amp; Gemology</i> (Summer 1982) <u>18</u> (2):72-78.
	DR	Shigley, J. et al., "Measurement of Color in Faceted Gemstones," <i>GIA World News</i> , pp. 6-8
	DS	Shipley, R. "Electronic Colorimeter for Diamonds", <i>Gem &amp; Gemology</i> (Spring 1958) 9(5):136-143
	DT	1998 Adamas Gemological Laboratory, SAS 2000 Spectrophotometer Analysis System, promotional material
	DU	1998 Adamas Gemological Laboratory, SAS 2000 Spectrophotometer Analysis System, promotional material, original publication date unknown
	DV	1996 Austron Digital Diamond Colorimeter, Operating Instructions
	DW	1990 GIA GIL Gem Grading Report, promotional brochure
	DX	1997 Gran Computer Industries, Inc., Model DC 2000fs Diamond Colorimeter, User Guide
	DY	Jewelers Circular Keystone, Advertisement for Diamond Color Slide
	DZ	New York Diamonds, Autumn 1990, No. 10. Article: Inside the GIA, the quest for accuracy

LA-175910.1

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